MODEL G0689
13" PLANER WITH BUILT-IN DUST COLLECTION
OWNER'S MANUAL

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⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes errors do happen and we apologize for them.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, immediately call our technical support for updates or clarification.

For your convenience, we always keep current Grizzly manuals and most updates available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these documents as soon as they are complete. Visit our site often to check for the latest updates!

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Functional Overview

The Model G0689 Planer allows the user to plane material from the surface of boards in precise increments. The depth-of-cut is adjusted with the cutterhead elevation crank and is measured by the cutterhead elevation scale or the depth-of-cut gauge. One turn of the crank raises or lowers the cutterhead 1/16".

Once the depth-of-cut is adjusted, the operator feeds the board into the infeed roller which pulls the board into the cutterhead, where material is removed. The outfeed roller then pulls the board away from the cutterhead. After the board is completely free from the outfeed roller, it can be returned to the infeed side of the machine. Larger workpieces can be passed across the return rollers on top of the machine.

The depth-of-cut is again adjusted, and the process is continued until the desired board thickness is reached.

Identification

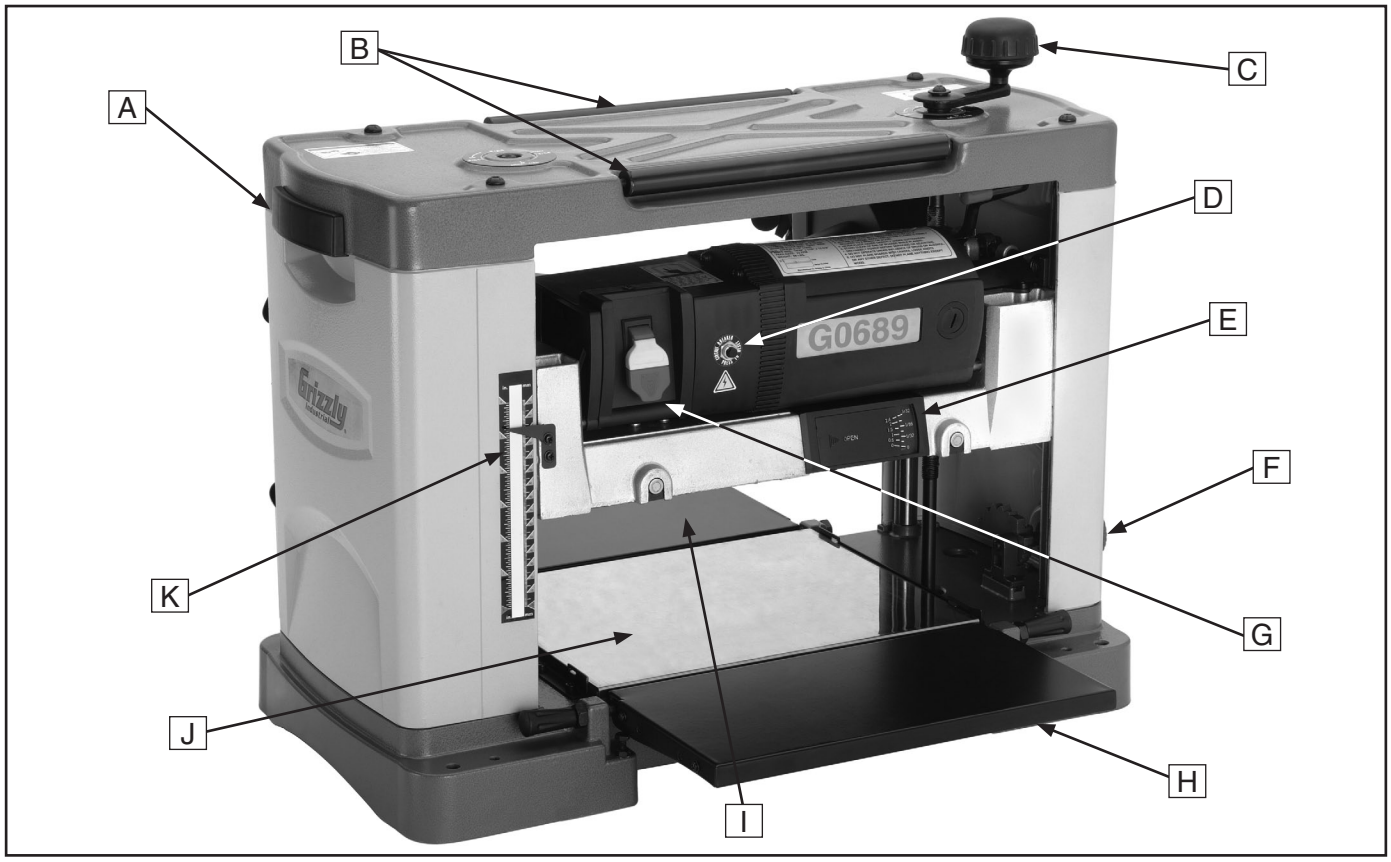


Figure 1. Identification.

A. Carrying Handle
B. Return Rollers
C. Cutterhead Elevation Crank
D. Reset Button
E. Depth-of-cut Gauge
F. Thickness Stop
G. ON/OFF Switch
H. Infeed Extension Wing
I. Outfeed Extension Wing
J. Platen
K. Cutterhead Elevation Scale

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

MODEL G0689 13" PLANER WITH BUILT-IN DUST COLLECTION

Product Dimensions:

Weight	88 lbs.
Length/Width/Height	26½" x 24½" x 21"
Foot Print (Length/Width)	24 7/16" x 13 3/8"

Shipping Dimensions:

Type	Cardboard
Content	Machine
Weight	95 lbs.
Length/Width/Height	28" x 16" x 21"

Electrical:

Switch	ON/OFF Safety Toggle
Cord Length	8 ft.
Cord Gauge	14 AWG
Recommended Breaker Size	20A
Plug Included	Yes

Motors:

Main

Type	Universal Brush Type
Horsepower	2 HP
Voltage	110V
Phase	Single
Amps	15A
Speed	17,500 RPM
Cycle	60 Hz
Number Of Speeds	1
Power Transfer	V-Belt Drive
Bearings	Shielded and Lubricated

Main Specifications:

Operation Information

Max. Cut Width	13"
Max. Cut Height	6"
Min. Stock Length	15"
Min. Stock Width	13/64"
Max. Stock Thickness	6"
No. Of Cuts Per Inch	70
No. Of Cuts Per Minute	16,000
Cutterhead Speed	8000 RPM
Planing Feed Rate	19 FPM
Max. Cut Depth Planing Full Width	1/16"
Max. Cut Depth Planing 5 Inch Wide Board	3/32"

Cutterhead Info

Cutterhead Type	Straight Knife
Cutterhead Dia.	2"
No. of Knives	2
Knife Type	Straight Double Edged HSS
Knife Size Length	13"
Knife Size Width	15/32"
Knife Size Thickness	1/16"
Knife Adjustment	Gibs and Springs

Table Info

Table Bed Size Length	10¼"
Table Bed Size Width	13"
Extension Wing Size Length	24⅝"
Extension Wing Size Width	13"

Construction

Table Construction	Steel and Cast Aluminum
Body Construction	Steel
Cutterhead Assembly Construction	Steel
Infeed Roller Construction	Steel/Rubber
Outfeed Roller Construction	Steel/Rubber
Paint	Epoxy

Other

Dust Port Size	2½"
Measurement Scale	Inch and Metric

Other Specifications:

Country Of Origin	China
Warranty	1 Year
Serial Number Location	Machine ID label on top of Machine
Assembly Time	20 minutes

Features:

Built-in Dust Collection
Top Mounted Return Rollers
Extra Large Fold-Down Table Extensions
Top Mounted Depth Adjustment
Thermal Overload Protection
Convenient Carry Handles on Side
Height Scale

SECTION 1: SAFETY

⚠WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the machine.**

⚠WARNING

Safety Instructions for Machinery

1. **READ THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

⚠WARNING
Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.

9. **MAKE WORKSHOP CHILDPROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power ***OFF*** and allow all moving parts to come to a complete stop before leaving machine unattended.

11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

12. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.

14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ***ON***.

18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.

19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.

20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.

21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

22. **DO NOT OVERREACH.** Maintain stability and balance at all times.

23. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY**.

25. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.

⚠WARNING
Additional Safety Instructions for Planers

1. **INSTRUCTION MANUAL.** This machine presents significant safety hazards to untrained users. Read/understand this entire manual before starting the planer.

2. **REACHING INSIDE PLANER.** Never reach inside planer or remove cover when the planer is connected to power.

3. **INFEED CLEARANCE SAFETY.** The infeed roller is designed to pull material into the cutterhead. Always keep hands, clothing, and long hair away from the infeed roller during operation to prevent being pulled in.

4. **BODY POSITION WHILE OPERATING.** The workpiece may kickback during operation. To avoid getting hit, stand to the side of the planer during the entire operation.

5. **PLANING CORRECT MATERIAL.** Only plane natural wood stock with this planer. DO NOT plane MDF, plywood, laminates, metal, stone, plastic, drywall, backerboard, or synthetic products.

6. **GRAIN DIRECTION.** Planing across the grain is hard on the planer and may cause workpiece kickback. Always plane in the same direction or at a slight angle with the wood grain.

7. **LOOKING INSIDE PLANER.** Wood chips fly around inside the planer at a high rate of speed. DO NOT look inside the planer or remove guards/covers during operation.

8. **CUTTING LIMITATIONS.** The planer may kickback a workpiece at the operator or be damaged if pushed beyond these limits.
   - Maximum Depth-of-cut <5" Wide.....$\frac{3}{32}$"
   - Maximum Depth-of-cut >5" Wide.....$\frac{1}{16}$"
   - Minimum Board Length.....15"
   - Minimum Board Thickness.....$\frac{13}{64}$"
   - Maximum # of Boards at One Time.....1

9. **CLEAN STOCK.** Planing stock with nails, staples, or loose knots MAY cause debris to kick out at the operator and WILL damage your cutters when they contact the cutterhead. Always thoroughly inspect and prepare stock to avoid these hazards.

10. **REMOVING JAMMED WORKPIECES.** To avoid serious injury, always stop the planer and disconnect power before removing jammed workpieces.

11. **DULL/DAMAGED KNIVES.** The planer may kickback a workpiece at the operator or give poor finish results if it is operated with dull or damaged knives.

12. **UNPLUGGING DURING ADJUSTMENTS.** When connected to power, the planer can be accidentally turned ***ON***. Always disconnect power when servicing or adjusting the components of the planer.

13. **WORKPIECE CLEARANCE.** Always verify workpiece has enough room to exit the planer before starting.

⚠WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

SECTION 2: CIRCUIT REQUIREMENTS

110V Operation

⚠WARNING

Serious personal injury could occur if you connect the machine to power before completing the setup process. DO NOT connect the machine to the power until instructed later in this manual.

⚠WARNING

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance MUST be verified by a qualified electrician!

Full Load Amperage Draw

Motor Draw ..... 15 Amps

Circuit Requirements

You MUST connect your machine to a grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

Recommended Circuit Size ..... 20 Amps

Power Connection Device

The Model G0689 comes with a 5-15 plug, similar to **Figure 2**, to connect the machine to power.

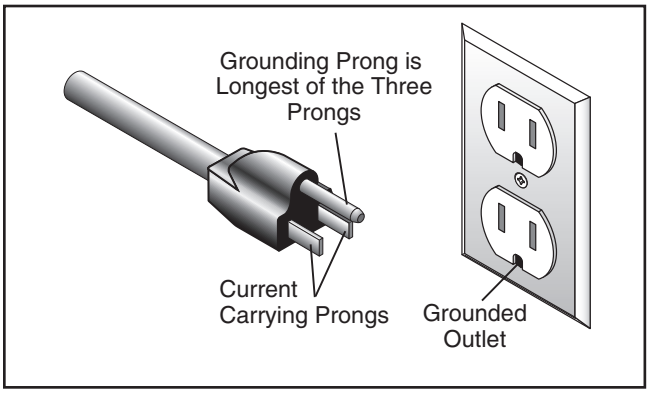
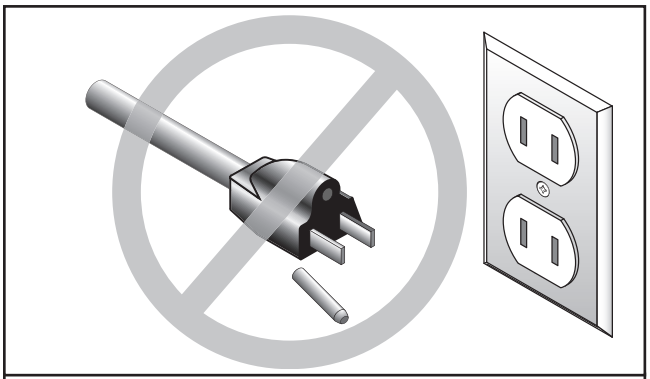


Figure 2. Typical 5-15 plug and receptacle.



⚠CAUTION

This machine MUST have a ground prong in the plug to help ensure that it is grounded. DO NOT remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

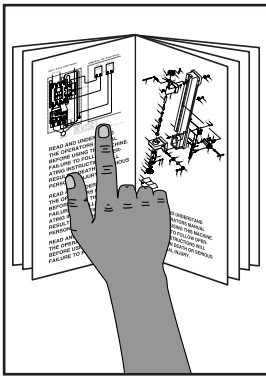
Extension Cords

We do not recommend using extension cords, but if you find it absolutely necessary:

- Use at least a 14 gauge cord that does not exceed 50 feet in length!
- The extension cord must have a ground wire and plug pin.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.

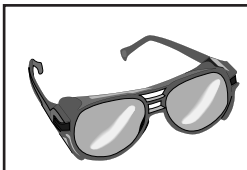
SECTION 3: SETUP

Setup Safety



WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



WARNING

Wear safety glasses during the entire setup process!

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.

Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

Items: (Figure 3)		Qty
A.	Planer (Not Shown)	1
B.	Magnets	2
C.	Dust Collection Bag	1
D.	Bag Clamp	1
E.	Cap Screw M6-1 x 20 (Crank)	1
F.	Lock Washer 6mm (Crank)	1
G.	Elevation Crank	1
H.	Hex Wrench 4mm	1

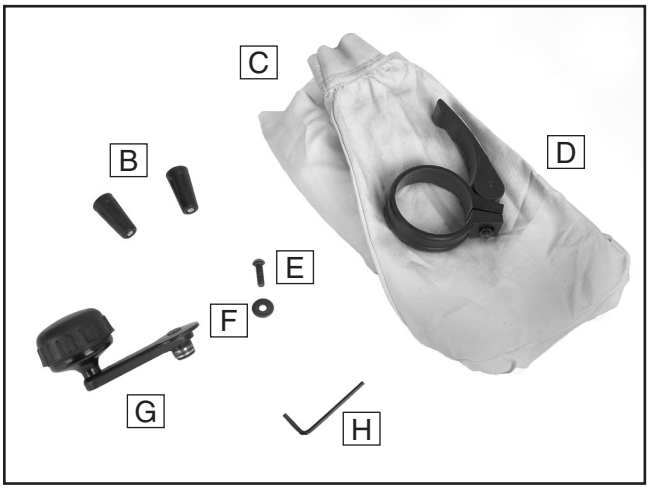
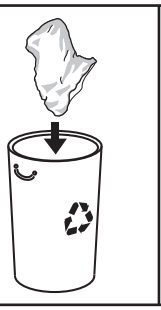


Figure 3. Inventory.

If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.



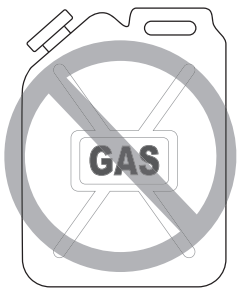
WARNING

SUFFOCATION HAZARD!

Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.

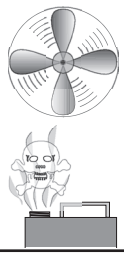
Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 4**. For thorough cleaning, some parts must be removed. **For optimum performance, clean all moving parts or sliding contact surfaces.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.



⚠WARNING

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.



⚠CAUTION

Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

G2544—Solvent Cleaner & Degreaser
H9692—Orange Power Degreaser
Great products for removing shipping grease.

Figure 4. Cleaner/degreasers available from Grizzly.

Site Considerations

Workbench Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support both the machine and the workpiece.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 5** for the minimum working clearances.

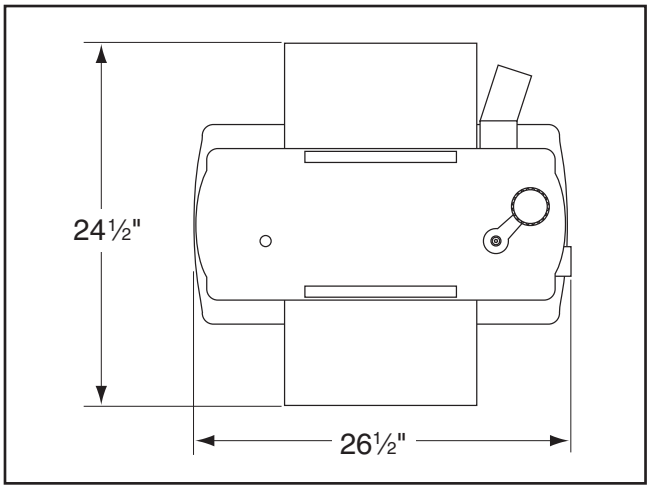
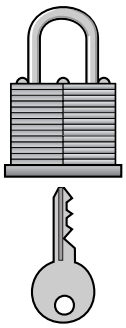


Figure 5. Minimum working clearances.



⚠CAUTION

Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.

Assembly

To attach the elevation crank assembly:

1. Align the flat portion inside the crank bore with the flat portion on the shaft, then place the crank assembly on the elevation shaft.

2. Thread the M6-1 x 20 button head screw with the flat washer through the crank and into the shaft to secure the crank in place, as shown in **Figure 6**. DO NOT over-tighten.

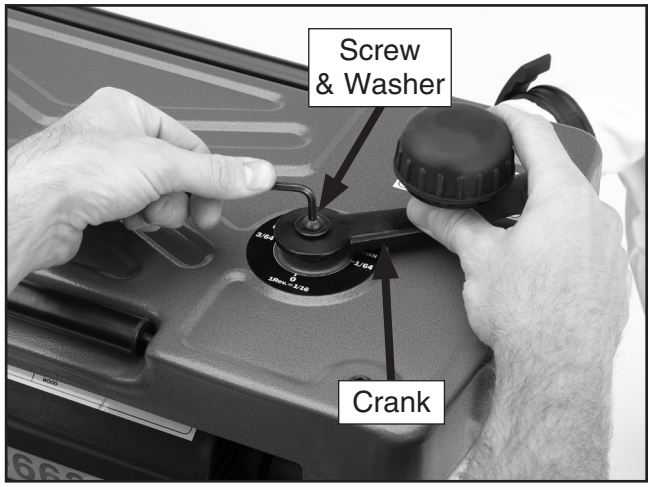


Figure 6. Attaching crank.

3. Attach the dust collection bag to the planer dust outlet by sliding the clamp over the mouth of the bag, placing the bag over the dust outlet, then positioning and locking the clamp over both the bag and the outlet, as shown in **Figure 7**.

Figure 7. Dust collection bag.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety disabling key on the switch works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 24**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

To test run the machine:

1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is setup properly.

2. Make sure all tools and objects used during setup are cleared away from the machine.

3. Connect the machine to the power source.

4. Verify that the machine is operating correctly by turning the machine ***ON***.

   —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

Continued on next page →

5. Turn the machine ***OFF***.

6. Remove the switch disabling key, as shown in **Figure 8**.

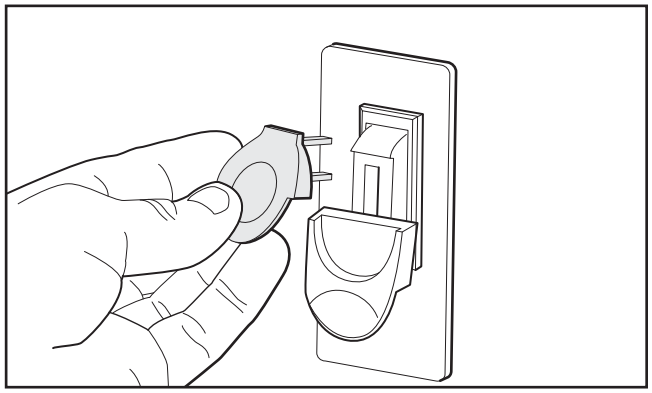


Figure 8. Removing switch key from paddle switch.

7. Try to start the machine with the paddle switch.

   —If the machine does not start, the switch disabling feature is working as designed.

   —If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Mounting

Once you have confirmed that your machine is running properly, you may choose to mount it to a workbench through the holes in the base.

The strongest mounting option is a "Through Mount" where holes are drilled all the way through the workbench, and hex bolts, washers, and hex nuts are used to secure the planer to the workbench.

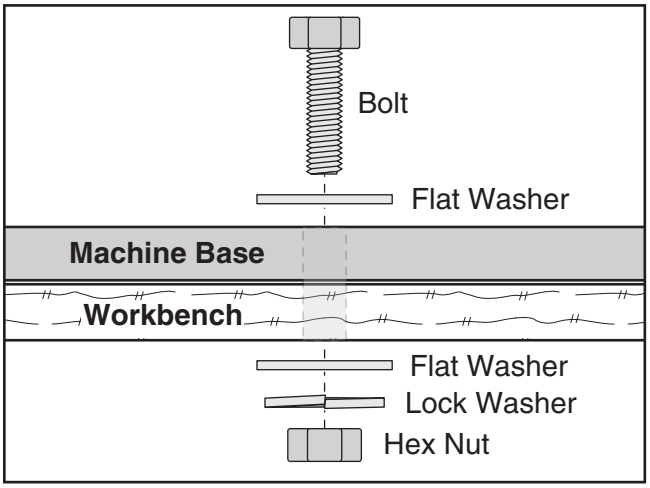


Figure 9. Example of a through mount setup.

Another option for mounting is a "Direct Mount" where the machine is simply secured to the workbench with a lag screw.

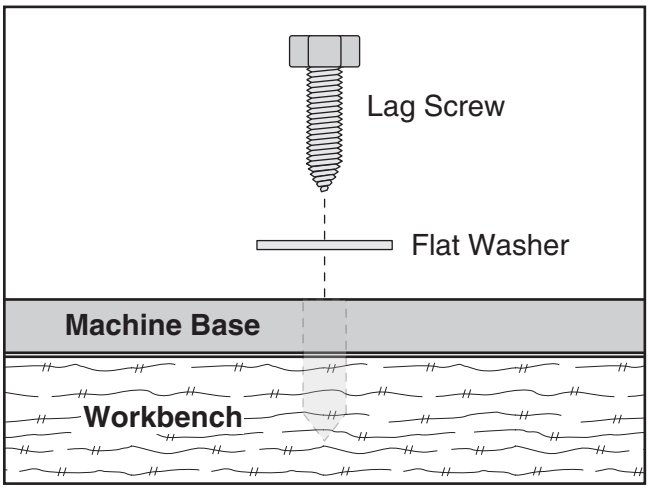


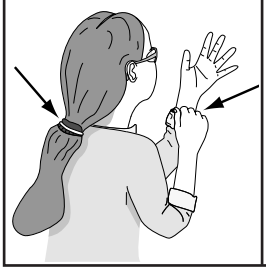
Figure 10. Example of a direct mount setup.

SECTION 4: OPERATIONS

Operation Safety

⚠WARNING

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



⚠WARNING

Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing and long hair away from moving machinery.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Basic Controls

Use the descriptions and figures below to become familiar with the basic controls of your machine.

Cutterhead Elevation Scale: Displays the elevation the cutterhead is above the platen. The value indicated is the effective thickness of the board after it is processed through the machine.

ON/OFF Safety Paddle Switch: Turns the cutterhead ***ON***/***OFF.*** Safety key can be removed to disable the machine.

Depth-of-cut Gauge: Displays the depth of the cut being made, depending upon the actual workpiece thickness.

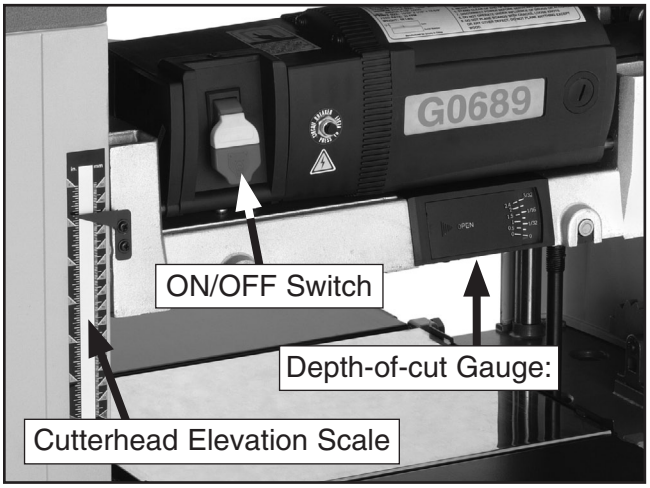


Figure 11. Basic controls.

Elevation Crank: Controls the elevation of the cutterhead.

Elevation Lock: Locks the vertical position of the cutterhead to prevent unwanted movement during use.

Thickness Stop: Limits downward travel of the cutterhead at specific distances from the platen to easily plane workpieces to specific thicknesses.

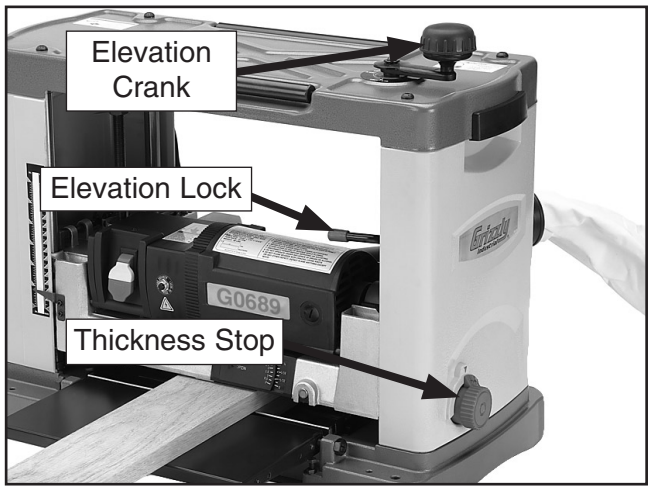


Figure 12. Basic controls (continued).

ON/OFF Switch

The ON/OFF switch is located on the front of the planer. The switch has a disabling key that, when removed, allows it to be locked in the OFF position. To use this feature, push the switch to the OFF position and pull the disabling key out. If the key is removed when the planer is ***ON***, it can still be turned ***OFF***, but it will not be able to be restarted until the key is replaced (**Figure 13**).

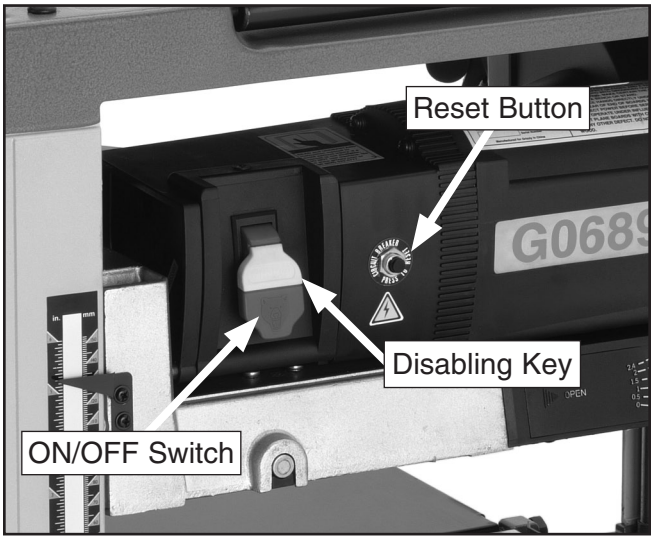


Figure 13. Location of switch and reset button.

Reset Button

The Model G0689 Planer comes equipped with a thermal overload protection switch which will trip if the motor gets too hot. To reset the button, turn the switch to the OFF position, wait a few minutes for the motor to cool, and then depress the reset button. If the reset button does not stay depressed, wait longer before resetting to allow the motor to cool.

Depth-of-Cut

The planing depth is controlled by the cutterhead elevation crank on top of the planer. Turning the crank clockwise raises the cutterhead and turning it counterclockwise lowers the cutterhead.

The Model G0689 has multiple methods for determining the depth-of-cut depending on your planing needs. The elevation crank, cutterhead elevation scale, thickness stop, and depth-of-cut gauge all provide a means for accurately measuring the material that will be removed from wood workpieces.

Elevation Crank

The elevation crank provides a simple and accurate method for producing consistent-depth cuts on multiple passes. The pitch of the elevation leadscrew is 16 threads per inch, meaning that every turn of the crank will lower the cutterhead 1/16". Using this as a base, you can make passes with a depth-of-cut of 1/64", 1/32", 3/64" and 1/16" by turning the crank 1/4 turn, 1/2 turn, 3/4 turn, and one full turn, respectively (**Figure 14**).

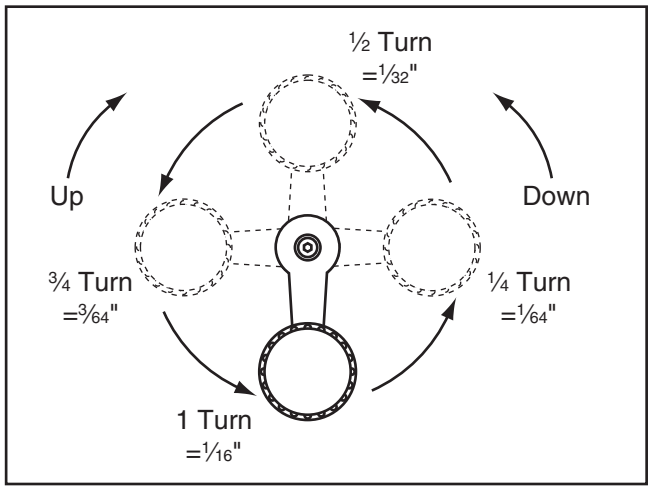


Figure 14. Crank elevation increments.

Note: *Any time you switch directions with the cutterhead elevation crank, there will be a small amount of backlash—so the first turn of the crank after switching directions will be slightly less than 1/16". However, as long as you move the crank in the same direction during operation, backlash will not be a factor.*

Depth-of-Cut Gauge

The depth-of-cut gauge can be used to accurately and directly measure the depth-of-cut, independent of workpiece thickness. By measuring the difference in elevation of the top surface of the workpiece and the cutterhead knives (at their lowest points), the value displayed on the depth-of-cut gauge accurately represents the thickness of material that will be removed in that pass.

To use the depth-of-cut gauge:

1. Lower the cutterhead assembly to just above your workpiece, then place your workpiece under the center of the cutterhead assembly, as shown in **Figure 15**. (Make sure the workpiece only extends 1"–2" under the front of the gauge and does not extend into the path of the cutterhead knives.)

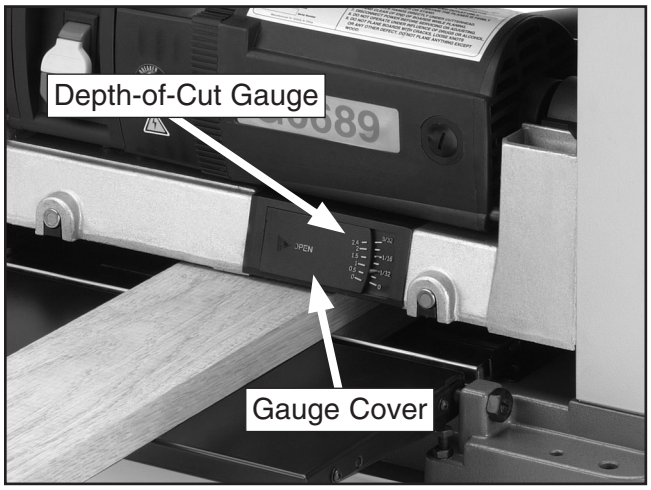


Figure 15. Depth-of-cut gauge.

2. Continue lowering the cutterhead assembly until you see the depth-of-cut gauge indicator begin to move. Turn the cutterhead elevation crank until the desired depth-of-cut is indicated by the gauge.

3. Remove the workpiece, then make your planing pass.

   Note: *The depth-of-cut gauge should only be used for approximate measurements. If precise workpiece thicknesses are needed, use calipers to ensure your workpieces meet your standards.*

   Note: *Sliding the gauge cover to the "Open" position disables the gauge.*

Thickness Stop

The thickness stop stops the cutterhead assembly at pre-set workpiece thicknesses. Use the thickness stop to plane to any of the following thicknesses: ⅛", ¼", ½", ¾", 1", and 1¼".

To use the thickness stop:

1. Rotate the thickness stop knob to the desired setting (**Figure 16**).

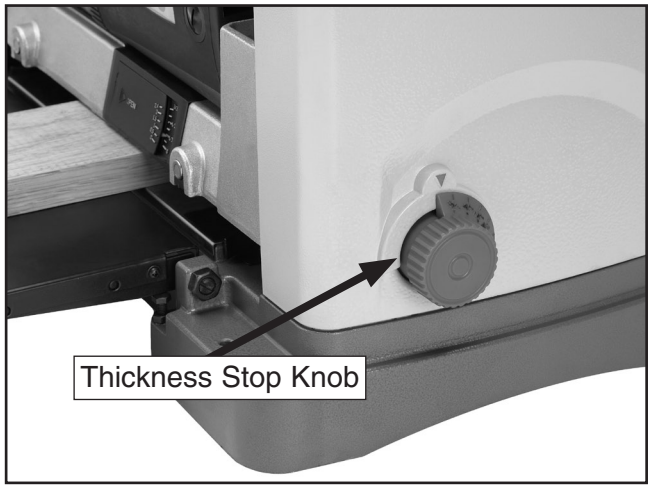


Figure 16. Thickness Stop Knob.

2. Plane the board, pass by pass, lowering the cutterhead with each pass until the cutterhead assembly reaches the thickness stop and no longer lowers.

   Note: *The thickness stop should only be used for approximate measurements. If precise workpiece thicknesses are needed, use calipers to ensure your workpieces meet your standards.*

Cutterhead Elevation Scale

The cutterhead elevation scale displays the distance between the cutterhead knives (at their lowest points) and the platen. This represents the workpiece thickness produced after the planing pass is made (**Figure 17**).

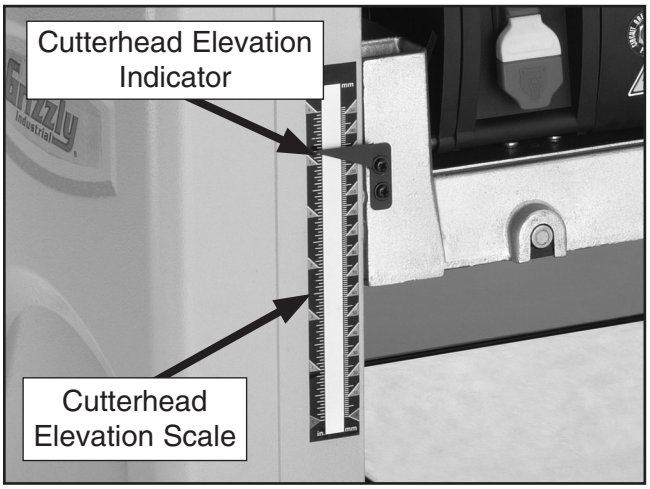


Figure 17. Depth-of-cut scale and indicator.

Example: If you need to plane a board down to 9/16", simply make multiple passes (no greater than the maximum depth-of-cut) until the cutterhead elevation scale reads 9/16". A final pass at this setting will create a 9/16" thick workpiece.

Note: *The cutterhead elevation scale does not provide a precise measurement and should only be used for approximate measurements. If precise workpiece thicknesses are needed, use calipers to ensure your workpieces meet your standards.*

Elevation Lock

To ensure that the cutterhead assembly does not move during planing, the Model G0689 is equipped with an elevation lock.

To use the elevation lock, set the cutterhead assembly to the desired elevation, then lower the elevation lock lever. To release the lock, lift the lever (**Figure 18**).

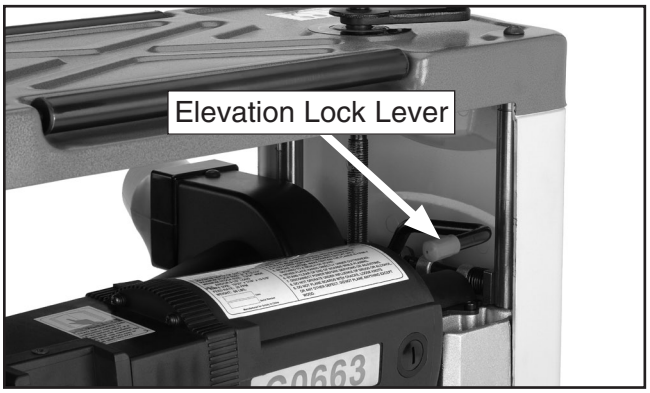


Figure 18. Elevation lock lever.

Basic Operations

To use the planer:

1. Put on safety glasses.

2. If your workpiece is bowed, surface plane the workpiece on a jointer until one side is flat—doing so will ensure that it sits solidly on the planer table during operation.

3. Place the workpiece onto the infeed extension wing with the flat side down, so that the front edge of the workpiece is just under the cutterhead assembly enough to set the depth of cut, and set the depth-of-cut, using the **Depth-of-Cut Gauge** (**Page 16**). Be sure not to exceed the maximum depth-of-cut.

4. Lower the elevation lock lever, then remove the workpiece.

5. Turn the planer ***ON***.

6. With the flat side of the board down on the table, make sure not to stand directly in front or behind the workpiece to reduce the risk of a kickback injury, then feed the workpiece into the front of the planer.

—If the cut is too deep and bogs down the planer, turn the planer ***OFF*** immediately, allow it to come to a complete stop, raise the cutterhead, remove the workpiece, reduce the depth-of-cut, then return to **Step 4**.

Note: *The infeed and outfeed rollers will control the feed rate of the workpiece as it passes through the planer. Do not push or pull on the workpiece.*

7. Once the workpiece is clear of the outfeed roller, measure the workpiece thickness. If further planing is needed, return the workpiece to the infeed extension wing, lift the elevation lock lever, adjust the depth-of-cut, then continue.

8. Continue this process until the desired thickness is reached.

Planing Tips

- Inspect your lumber for twisting or cupping, and surface one face on a jointer if necessary.
- Scrape off all glue before planing glued-up panels.
- DO NOT plane more than one piece at a time.
- Never remove more than the recommended amount of material on each pass. Remove less material on each pass when planing wide or dense stock.
- Support the workpiece on both ends. Get assistance if you are planing long lumber, or use roller stands to support the workpiece.
- Measure the workpiece thickness with calipers to get exact results.
- Carefully inspect all stock to make sure it is free of large knots or foreign objects that may damage your knives, cause kickback or eject from the planer.
- When possible, plane equal amounts on each side of the board to reduce the chance of twisting or cupping.
- Use the entire width of the planer to wear knives evenly.
- Always plane WITH the grain direction of the wood. Never plain cross-grain or end-grain.

Wood Characteristics

Below is a list of wood characteristics you may encounter when planing. The following descriptions of defects will give you some possible answers to problems you may encounter while planing different materials. Possible solutions follow the descriptions.

Chipped Grain

Problem: Usually a result of cutting against the grain, planing lumber with knots or excessive amount of cross grain, or using dull knives.

Solution: Decrease the depth-of-cut. Inspect your lumber and determine if its grain pattern is causing the problem. If the lumber does not show substantial crossgrain, inspect your knives.

Fuzzy Grain

Problem: Usually caused by surfacing lumber with too high of a moisture content. Sometimes fuzzy grain is an unavoidable characteristic of some woods, such as basswood. Fuzzy grain can also be caused by dull knives.

Solution: Check the lumber with a moisture meter. If moisture is greater than 20%, sticker the lumber and allow it to dry. Otherwise, inspect the knife condition.

Snipe

Problem: Occurs when board ends have more material removed than the rest of the board. Usually caused when the workpiece is not properly supported as it goes through the machine. In many cases, however, a small amount of snipe is inevitable.

Solution: The best way to deal with snipe is by planing lumber longer than your intended work length and then cutting off the excess after planing is completed.

Pitch & Glue Build-up

Problem: Glue and resin buildup on the rollers and cutterhead will cause overheating by decreasing cutting sharpness while increasing drag in the feed mechanism. The result can include scorched lumber as well as uneven knife marks and chatter.

Solution: Clean the rollers and cutterhead.

Chip Marks or Indentations

Problem: Chip indentation or chip bruising is the result of wood chips not being thrown away from the cutterhead and out of the machine. Instead they are carried around the cutterhead, deposited on the planed surface and crushed by the outfeed roller. Chip indentations can be caused by a number of reasons, some of which are:

- The type of lumber being planed. Certain species have a tendency to chip bruise.
- A high moisture content (over 20%) or surface moisture. Typically found in air-dried stock where the surface is dry but the inside needs a longer time to season.
- Dull knives.
- Too much material being removed in one pass.
- Dust bag is full.

Solution:

- Lumber must be completely dry, preferably kiln-dried (KD). Air-dried (AD) lumber must be seasoned properly and have no surface moisture. DO NOT surface partially-air-dried (PAD) lumber.
- Make sure planer knives are sharp.
- Reduce depth-of-cut.
- Empty dust bag.

Wood Types

The species of wood, as well as its condition, has a dramatic effect on the depth-of-cut the planer can effectively take with each pass. A greater shear strength indicates a harder wood. A shallower cut should be used with harder woods.

Commonly used hardwoods and their associated shear strengths are illustrated in **Figure 19**.

Type	Shear (PSI)
Black Locust	2,480
Sugar Maple	2,330
Pecan Hickory	2,080
White Oak	2,000
White Ash	1,950
Black Cherry	1,700
American Elm	1,510
Black Walnut	1,370
Red Alder	1,080
Basswood	980
Cottonwood	930

Figure 19. Common hardwood shear strengths.

Similarly, common softwood shear strengths are displayed in **Figure 20**.

Type	Shear (PSI)
Western Larch	1,410
Tamarack	1,280
Douglas Fir	1,160
Alaska Cedar	1,130
Sitka Spruce	1,150
Sugar Pine	1,050
Cypress	1,000
Redwood (OG)	940
Red Cedar	860
White Pine	850
Balsam Fir	710

Figure 20. Common softwood shear strengths.

SECTION 5: ACCESSORIES

T20803—13" Replacement Knives
Set of two reversible replacement knives for the Model G0689 13" Planer.

T20501—Face Shield, 4" Crown, Clear
T20502—Face Shield, 7" Crown, Clear
T20448—Economy Clear Safety Glasses
T20452—"Kirova" Anti-Relective Glasses
T20456—"Dakura" Clear Safety Glasses
H0736—Shop Fox® Safety Glasses
These glasses meet ANSI Z87.1-2003 specifications. Buy extras for visitors or employees. You can't be too careful with shop safety!

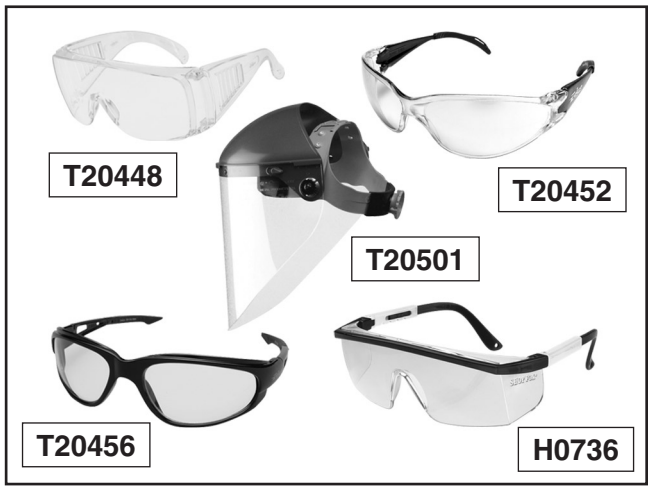


Figure 21. Our most popular eye protection.

G7313—700 lb Capacity SHOP FOX® Stand
A perfect stand for mounting your smaller machines on. Sturdy and rugged for everyday shop use.

Figure 22. G7313 **SHOP FOX®** Stand.

H4978—Deluxe Earmuffs - 27dB
H4979—Twin Cup Hearing Protector - 29dB
H4977—Work-Tunes Radio Earmuffs - 25dB
Protect yourself comfortably with a pair of cushioned earmuffs. Especially important if you or employees operate for hours at a time.

Figure 23. Our most popular earmuffs.

G2525—Dust Collection Basics Handbook
This inexpensive, 64-page book carefully guides you through setting up a quality dust collection system in your shop. Includes an easy-to-follow walk-through on designing the optimum dust collection system, and practical tips for minimizing cost and maximizing performance. A must have for beginners!

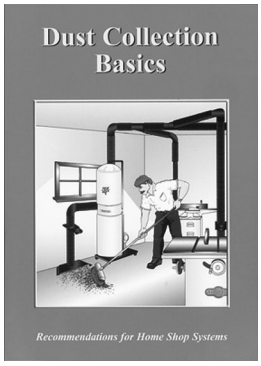


Figure 24. Dust Collection Basics handbook.

Call 1-800-523-4777 To Order

T20514—Small Half-Mask Respirator
T20515—Medium Half-Mask Respirator
T20516—Large Half-Mask Respirator
T20511—Pre-Filter P100
T20539—Cartridge Filter 2PK P100
T20541—Cartridge Filter 2PK P100 & O Vapor
Wood and other types of dust can cause severe respiratory damage. If you work around dust everyday, a half-mask respirator can greatly reduce your risk. Compatible with safety glasses!

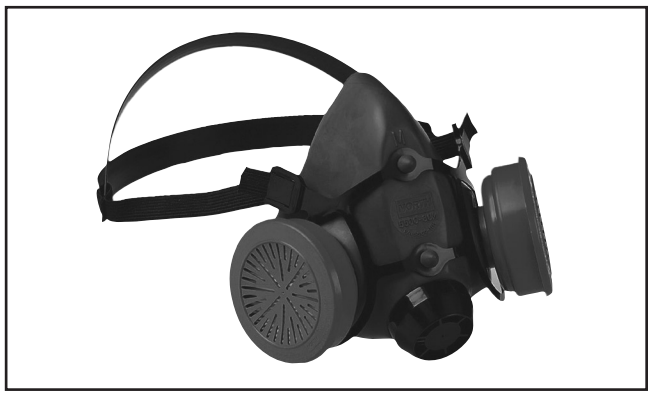


Figure 25. Half-mask respirator with disposable cartridge filters.

G8983—Tilting Roller Stand
Adjusts from 26" to 44", 0º-45º. 150 lb. capacity.
G8984—Single Roller Stand
Adjusts from 26 ⅝" to 45". 250 lb. capacity.
G8985—5 Roller Stand
Adjusts from 26" to 44⅝". 250 lb. capacity.
These super heavy-duty roller stands feature convenient hand knobs for fast height adjustment.

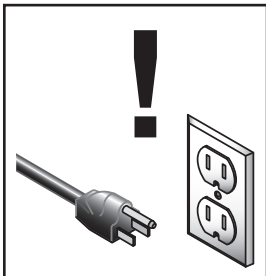
Figure 26. SHOP FOX® Roller Stands.

G2752—4" Rolling Floor Sweep
G2753—4" Bench Dust Collection Attachment
G2754—4" Floor Dust Collection Attachment
These attachments are indispensable for collecting dust at any machine. The rolling floor sweep is also a convenient way to keep the shop floor or workbench top clean! Designed for use with 4" flexible hose (not included).

Figure 27. Dust collection attachments.

Call 1-800-523-4777 To Order

SECTION 6: MAINTENANCE



WARNING

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

Schedule

For optimum performance from your machine, follow this maintenance schedule:

Daily

- Check/correct loose hardware.
- Check/correct damaged knives.
- Check/correct worn or damaged wires.
- Correct any other unsafe condition.
- Lubricate elevation screws, elevation lock cams, columns, and feed roller chain drive.

Monthly

- Check for belt tension, damage, or wear.
- Remove cutterhead guard and thoroughly clean all built-up sawdust from the cutterhead area.

Cleaning

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If resin has built up, use a resin dissolving cleaner to remove it.

Lubrication

There are four primary points that require periodic lubrication—the head elevation screws, the elevation lock cams, the columns, and the feed roller chain drive. Access for lubrication requires removing the top and side covers of the machine first (**Figure 28**).

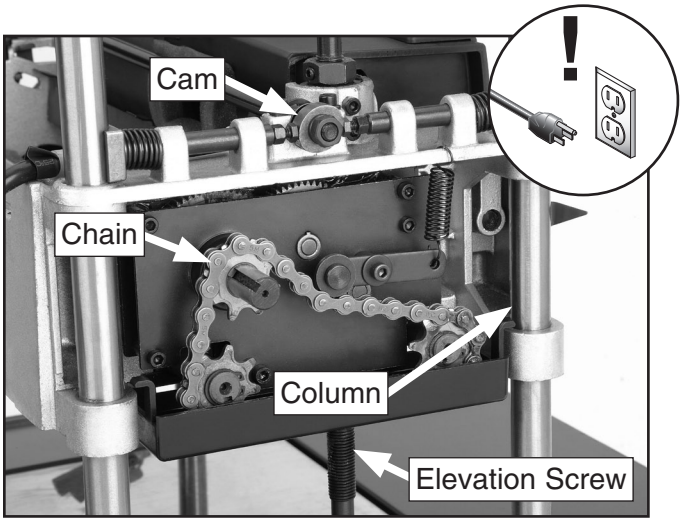


Figure 28. Lubrication points of chain and elevation screws.

The elevation screws, cams, and columns on each side of the machine should be cleaned with minerals spirits, then coated with a light multi-purpose grease.

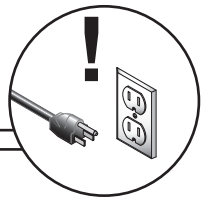
The chain drive can be lubricated with a spray oil. Saturate each chain link, then wipe off the excess so that sawdust will not be attracted.

Replace the sides, cover, and crank when complete.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting



Symptom	Possible Cause	Possible Solution
Motor will not run.	1. No power to planer. 2. Motor overload protection tripped. 3. Defective switch or loose wiring. 4. Brushes are at fault.	1. Check power supply. 2. Turn planer ***OFF***. Reset overload protection (**Page 15**). 3. Inspect all lead connections on switch/motor for loose or open connections. 4. Inspect/Replace.
Fuses or circuit breakers blow.	1. Short circuit in line cord or plug. 2. Brushes are at fault.	1. Repair or replace cord or plug for damaged insulation and shorted wires. 2. Inspect/Replace.
Motor overheats or operates at limited RPM.	1. Motor overloaded during operation. 2. Brushes are at fault.	1. Reduce cutting load; take lighter cuts. 2. Inspect/Replace.
Motor stalls or shuts off during a cut.	1. Cut is too deep. 2. Motor overload protection tripped. 3. Short circuit in motor or loose connections. 4. Circuit breaker tripped. 5. Brushes are at fault.	1. Reduce depth-of-cut. 2. Turn planer ***OFF***. Reset overload protection (**Page 15**). 3. Repair or replace connections on motor for loose or shorted terminals or worn insulation. 4. Install correct or repair circuit breaker; reduce number of machines running on that circuit. 5. Inspect/Replace.
Cutterhead slows or squeals when cutting, especially on start-up.	1. Belt worn out. 2. Brushes are at fault.	1. Replace belt (**Page 28**). 2. Inspect/Replace.
Infeed/outfeed rollers not rotating.	1. Chain and sprockets are worn.	1. Replace chain and sprockets.
Vibration when running or cutting.	1. Knives are dull. 2. Loose or damaged cutterhead. 3. Damaged belt. 4. Worn cutterhead bearings.	1. Replace knives. 2. Tighten or replace cutterhead. 3. Replace (**Page 28**). 4. Check/replace cutterhead bearings.
Boards don't feed properly into machine.	1. Knives are dull. 2. Sawdust in feed rollers.	1. Replace knives. 2. Clean feed roller (**Page 29**)

Knife Replacement

⚠CAUTION

The cutterhead knives on the Model G0689 are extremely sharp. Brushing your finger along the edge can result in a severe cut. Take extreme caution when doing any of the adjustments involving the cutterhead knives. Wear heavy leather gloves anytime it is necessary to manually rotate the cutterhead assembly.

NOTICE

To maintain accurate and consistent planing results, we do not recommend sharpening the knives. Instead, replace both knives when they get dull.

The condition of the knives on the Model G0689 Planer will affect the precision of the cut. During operation, watch for the following signs of dulled knives.

- Raised grain occurs as a result of dull knives hammering at the surface of the wood.
- A "fuzzy" appearance on the surface of the wood occurs as a result of dull knives tearing, rather than cutting the wood fibers.
- Grooves occur as a result of nicks along the knife edge.
- Difficulty feeding the workpiece into the planer.

If any of these signs become apparent during use, the knives must be reversed or replaced. Do not attempt to sharpen the knives.

Tools Needed **Qty**
Hex Wrench 4mm..... 1

To remove the knives:

1. DISCONNECT PLANER FROM POWER!
2. Remove the cap screws from the knife guard, then remove the guard (**Figure 29**).

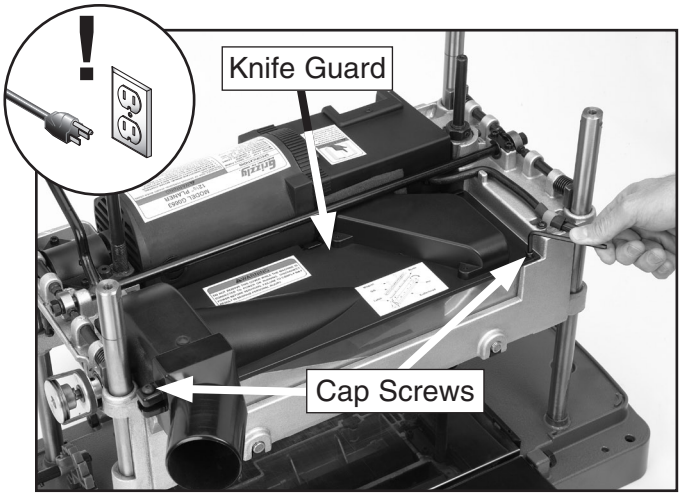


Figure 29. Removing knife guard (top and side covers removed for clarity).

3. Wearing heavy leather gloves, carefully turn the cutterhead towards you until the safety latch engages and the cutterhead no longer turns (**Figure 30**).

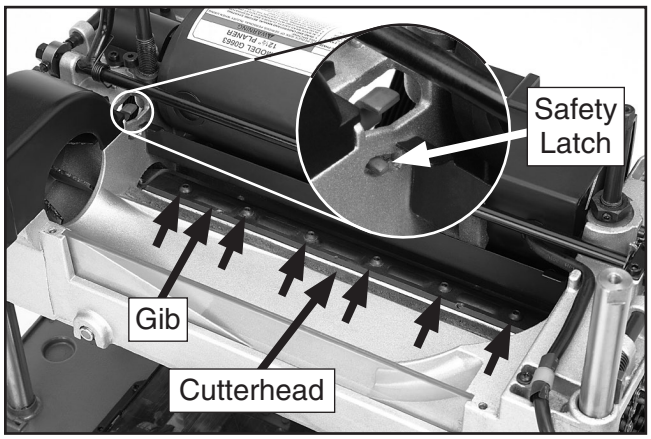


Figure 30. Exposed cutterhead.

4. Remove the six button head cap screws from the gib.

5. Use the included magnets, as shown in **Figure 31**, to first remove the gib, then the knife.

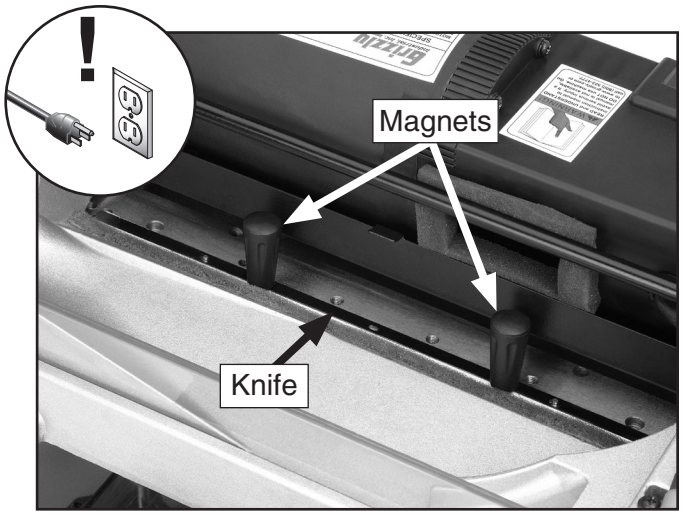


Figure 31. Knife removal.

6. Depress the safety latch (shown in **Figure 30**), then carefully rotate the cutterhead towards you approximately ¼ turn. Release the safety latch and continue rotating the cutterhead until the second knife is exposed and the safety latch again engages.

7. Repeat **Steps 4** and **5** for the second knife.

Before re-installing the knives, the cutterhead, gib and knife must be inspected. Neglecting to inspect these components may result in damage to the planer.

To inspect the cutterhead, gib, and knives:

1. DISCONNECT PLANER FROM POWER!

2. Carefully clean the cutterhead with a rag and with a flashlight, inspect the following:

   - Make sure the threaded screw holes do not contain wood material or sawdust.
   - Make sure that the hex socket and the threads of all cap screws are in good condition. Replace if questionable.
   - Make sure any resin or glue buildup on the cutterhead, gib, and knives is removed so the knife and gib will sit flat on the cutterhead.
   - Make sure the knives are free of cracks. If any cracks exist, replace both knives.

The knives on the Model G0689 Planer are reversible and should always be reversed or replaced as a matched set. To avoid downtime, we recommend having an extra set of knives for your planer (Model T20803 in the Grizzly catalog or website). Once the cutterhead, gib, and knives have been inspected and prepared, install the knives.

To install the knives:

1. DISCONNECT PLANER FROM POWER!

2. Using the magnets, position the knife over the two pins on the cutterhead. Be sure the knife is oriented with the beveled edge up, as shown in **Figure 32**.

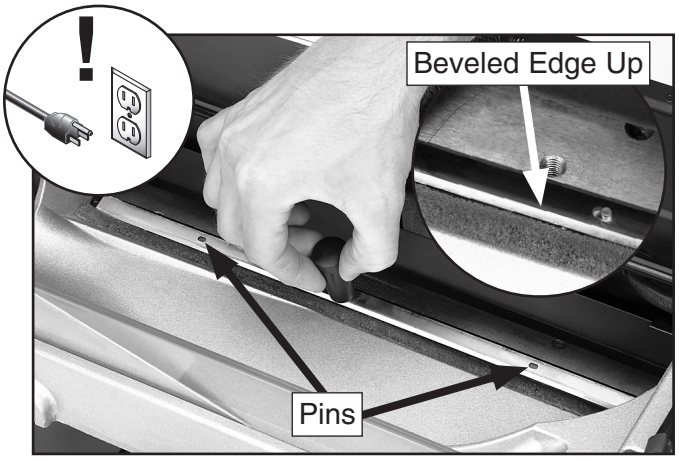


Figure 32. Knife installation.

3. Using the magnets, replace the gib over the knife. Secure the gib with the six screws in the locations shown in **Figure 33**.

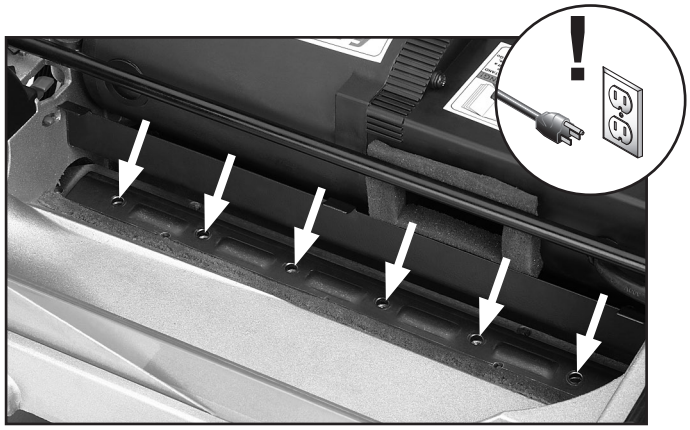


Figure 33. Gib installation.

4. Depress the safety latch, then carefully rotate the cutterhead towards you approximately ¼ turn. Release the safety latch and continue rotating the cutterhead until the second knife slot is exposed and the safety latch again engages.

5. Repeat **Steps 2** and **3** for the second knife, then replace the knife guard.

Motor

Keep the motor as clean as possible. Prevent any water, oil, or wood chips from penetrating inside the motor. Be sure to clean the machine after every use.

The bearings inside the motor are shielded and lubricated for the life of the bearing and require no routine maintenance.

This motor is equipped with long life carbon brushes. However, brush life expectancy is affected by motor loading. Planing very wide, dense boards or cutting too deep will reduce brush life from overheating. Check brushes after every ten to fifteen hours of operation or if motor loses power or becomes noisy (**Figure 34**).

Figure 34. Brush holder location (another brush is located on the other side of the motor from the one shown in this picture).

When the brushes are worn down to ¼" (6mm), it is time for replacement. When checking brushes, be sure to return each brush in the same position that it came from. When replacing old brushes, be sure to replace both brushes at the same time.

Drive Belt

The cutterhead is driven by a belt that is located on the right-hand side of the motor and cutterhead assembly (when facing the front of the machine). The belt is very durable, but with extended use may begin to slip, indicating the need for replacement.

Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 5mm	1
Hex Wrench 6mm	1

To replace the belt:

1. DISCONNECT PLANER FROM POWER!

2. Remove the elevation crank and the four button head cap screws that secure the top cover. Remove the top plate (**Figure 35**).

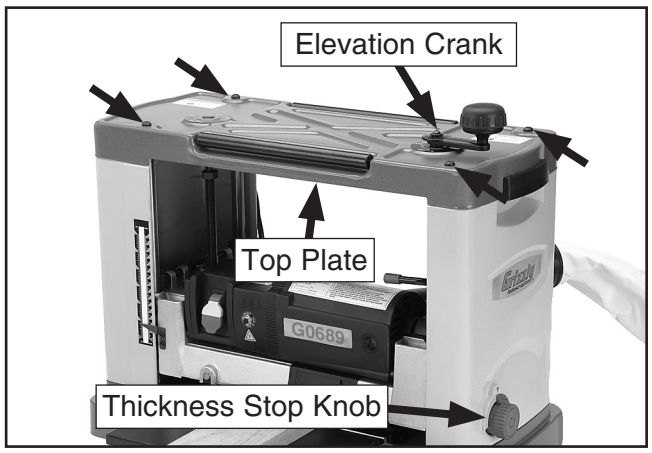


Figure 35. Top and side cover removal.

3. Remove the thickness stop knob by pulling outward on it, then lift and pull the right side cover off.

4. Remove the belt guard shown in **Figure 36** by removing the cap screws that secure it.

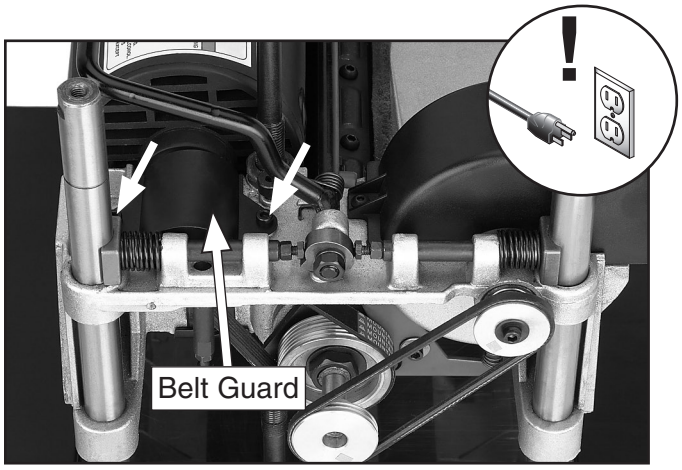


Figure 36. Belt guard.

5. Loosen the motor mount bolt, shown in **Figure 37**, to release tension on the belt.

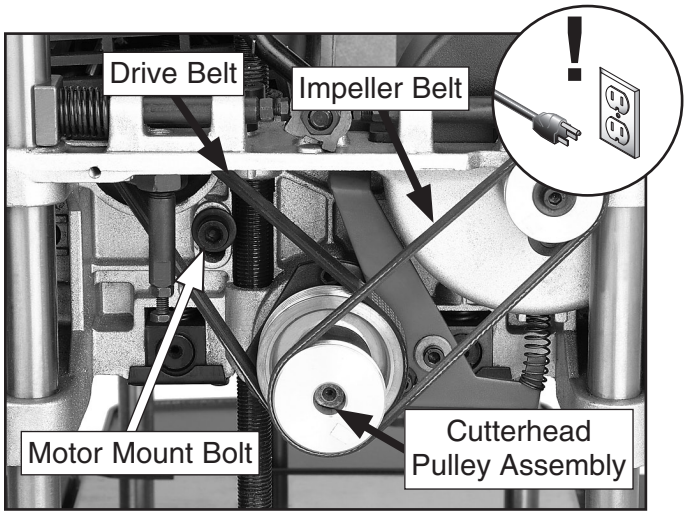


Figure 37. Cutterhead drive components.

6. Remove the impeller belt by rolling it off the cutterhead pulley assembly, then remove the drive belt.

7. Place the new drive belt over both pulleys. Lift the motor by hand using moderate force to apply tension to the belt, then tighten the motor mount bolt.

8. Replace the impeller belt, belt guard, side and top covers, thickness stop knob, button head cap screws, and cutterhead elevation crank in the reverse order from which they were removed.

Impeller Belt

The dust collection system on the Model G0689 is powered by a belt-driven impeller. The belt is very durable, but with extended use it may begin to slip, resulting in a reduction in dust collection performance.

Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 5mm	1

To replace the belt:

1. DISCONNECT PLANER FROM POWER!

2. Perform **Steps 2–3** from **Drive Belt** on **Page 28**.

3. Remove the impeller belt by first rolling it off the cutterhead pulley, then remove it completely (**Figure 38**).

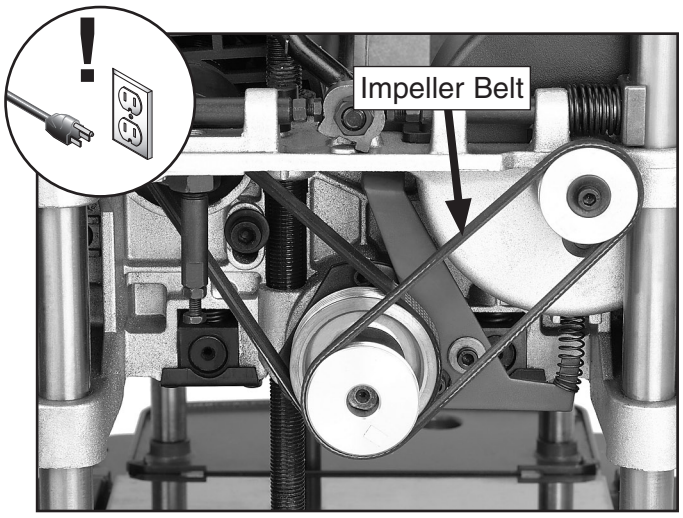


Figure 38. Impeller belt.

4. Replace the belt with a new one, then re-assemble the removed components in the reverse order from which they were removed.

Feed Rollers

The feed rollers rotate in bushing blocks that are spring loaded. The feed rollers ride up on the board so that the roller pressure is maintained. If chips or sawdust build up between the bracket and bushing block, the amount of roller vertical travel will be reduced, potentially causing improper feeding of lumber through the machine (**Figure 39**).

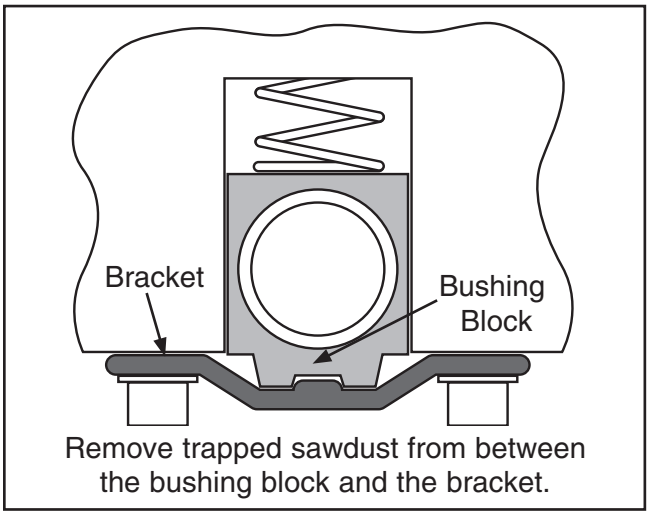


Figure 39. Location of potential trapped sawdust.

Periodically check and clean chips and sawdust from between the bushing blocks and brackets.

To clean the feed rollers:

1. DISCONNECT PLANER FROM POWER!

2. Remove the elevation crank and the top and side covers. This provides easy access to depress the rollers so that chips and sawdust can be easily removed.

3. Place a 4" high block of wood between one of the feed rollers and the planer bed. Ensure that the block of wood is not under the cutterhead.

4. Lower the cutterhead assembly down just enough so that the roller is pushed up against the spring and pressure is off of the two brackets.

5. Remove any trapped material from between the roller assembly and bracket.

6. Raise the cutterhead assembly and remove the block of wood.

7. Repeat **Steps 1–4** for the other feed roller.

8. Replace the sides, top plates, and elevation crank.

Extension Wing/ Table Alignment

Your planer is equipped with front and rear extension wings. Each wing folds up for machine mobility and folds down for machine operation. To check the alignment, lay a straightedge across the table and both wings (see **Figure 40**). If the straightedge does not sit flat across the table and both extension wings, adjustment is needed.

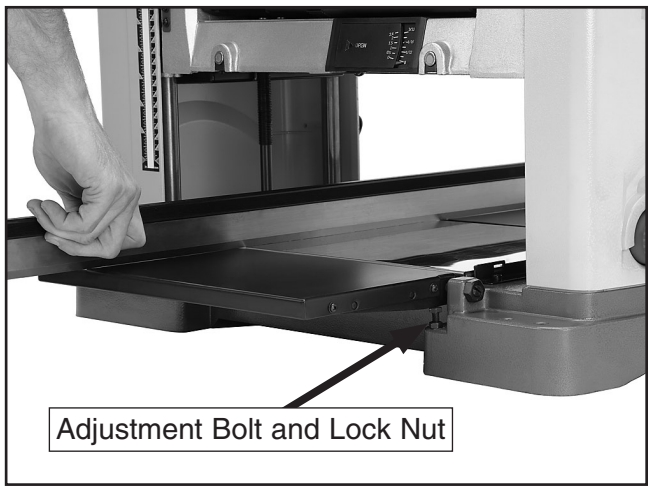


Figure 40. Aligning extension wings.

Tools Needed	Qty
Wrench 10mm	1
Straightedge	1

If adjustment is necessary, proceed as follows:

1. Loosen the lock nuts and adjustment bolts underneath each extension wing.

2. Hold a straightedge across the table and both wings, and turn the adjustment bolts so the wings and the table are on the same plane.

3. Without turning the adjustment bolts, tighten the lock nuts. Recheck to ensure consistency from side-to-side.

Elevation Lock Adjustment

The elevation lock lever adjustment is set at the factory and should not require adjustment. However, with extended use, it is possible that the locks may wear or come out of adjustment. If you notice that the elevation lock lever is lowering all the way without locking the cutterhead assembly movement, you may need to adjust it.

Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 5mm	1
Wrench 8mm	1

To adjust the elevation lock:

1. DISCONNECT PLANER FROM POWER!

2. Remove the side and top covers by performing **Steps 2–3** from **Drive Belt**, starting on **Page 28**.

3. Locate the four elevation lock adjustment bolts (two at each end of the cutterhead assembly; See **Figure 41**).

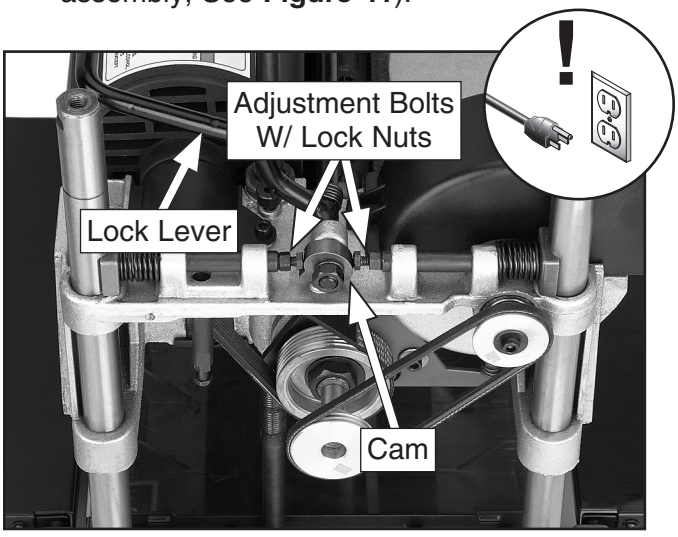


Figure 41. Elevation lock adjustment.

4. Loosen the lock nuts, then turn each adjustment bolt so that it just touches the cam when the lock lever is approximately halfway through its travel, then tighten the lock nuts.

   Note: *It is important that all four adjustment bolts are set equally. Failure to do this could cause the cutterhead to move during use, resulting in inconsistent planing.*

Thickness Stop Calibration

The thickness stop is set at the factory and should not require adjustment. However, with extended use, it is possible that the thickness stop may come out of adjustment. If you notice that use of the thickness stop is not producing results to your standards, you may need to adjust it.

Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 5mm	1
Wrench 8mm	1

To adjust the thickness stop:

1. Using a caliper to accurately measure the thickness, plane a board to exactly 1¼".

2. DISCONNECT PLANER FROM POWER!

3. Remove the side and top covers by performing **Steps 2–3** from **Drive Belt**, starting on **Page 28**. Replace the elevation crank and raise the cutterhead approximately 1".

4. Locate the thickness stop bolt and lock nut. Manually rotate the thickness stop to the position shown in **Figure 42**.

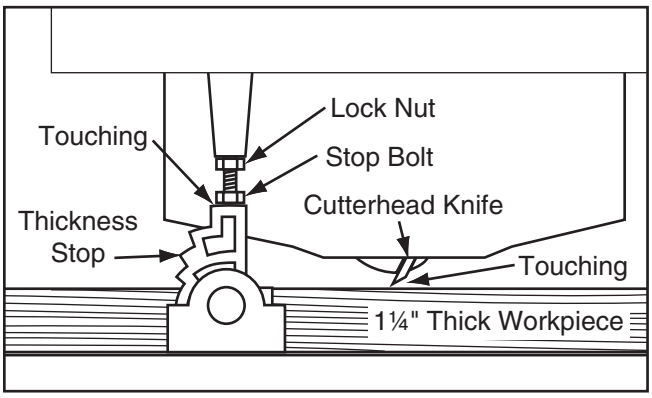


Figure 42. Thickness stop adjustment.

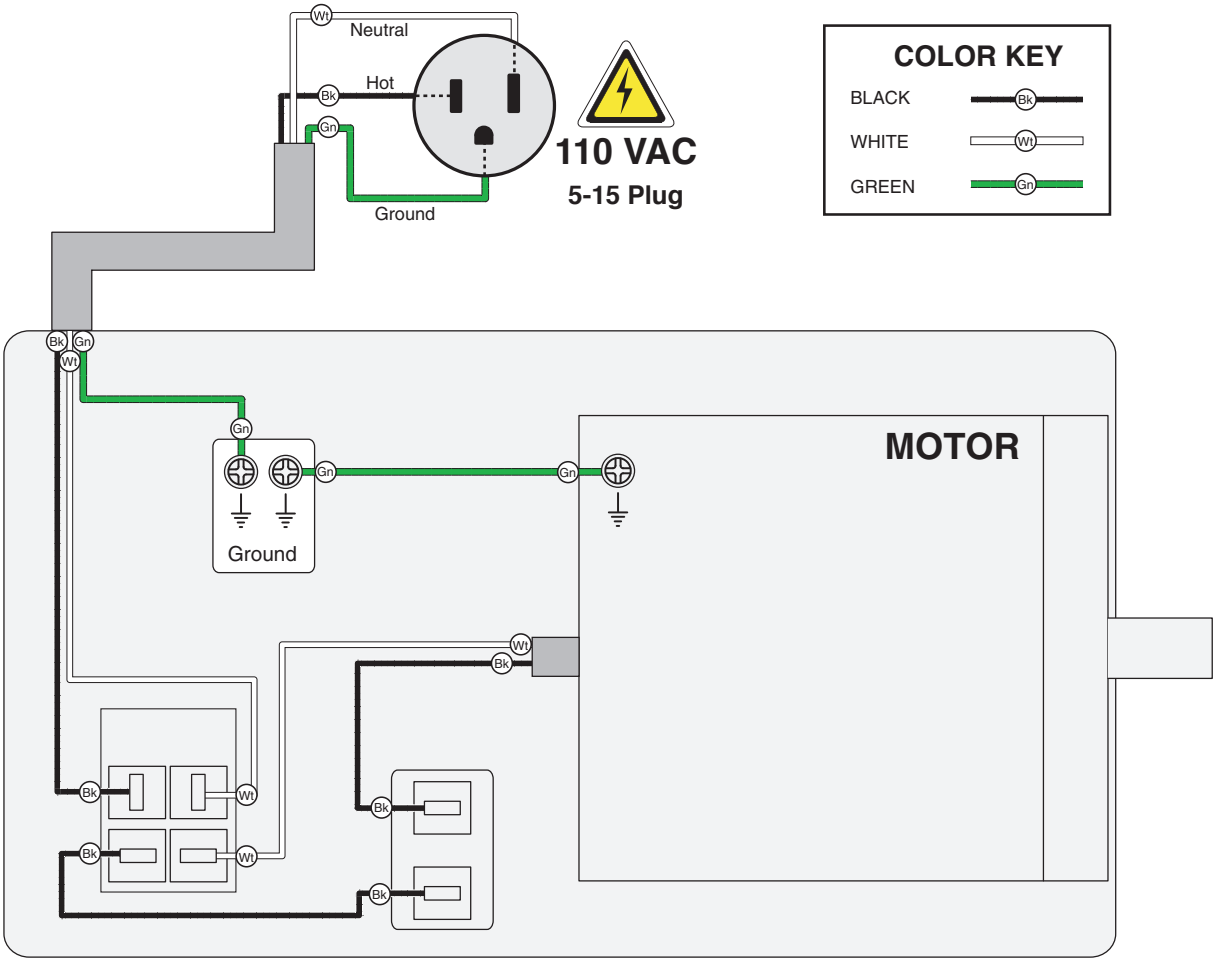
5. Place the 1¼" thick board on the table and lower the cutterhead until the knife just touches the board when the knife is at its lowest position (turn the belt pulley to rotate the cutterhead as needed).

6. Loosen the lock nut and adjust the stop bolt as needed until it just touches the thickness stop, then re-tighten the lock nut.

7. Reassemble the machine, then check to see if the thickness stop is producing the desired results. Repeat as necessary.

Wiring Diagram

View this page in color at *www.grizzly.com.*



PADDLE SWITCH
(viewed from behind)

OVERLOAD SWITCH
(viewed from behind)

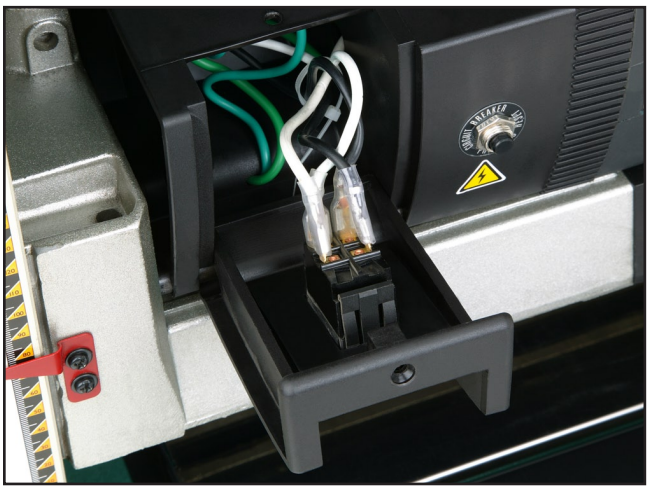
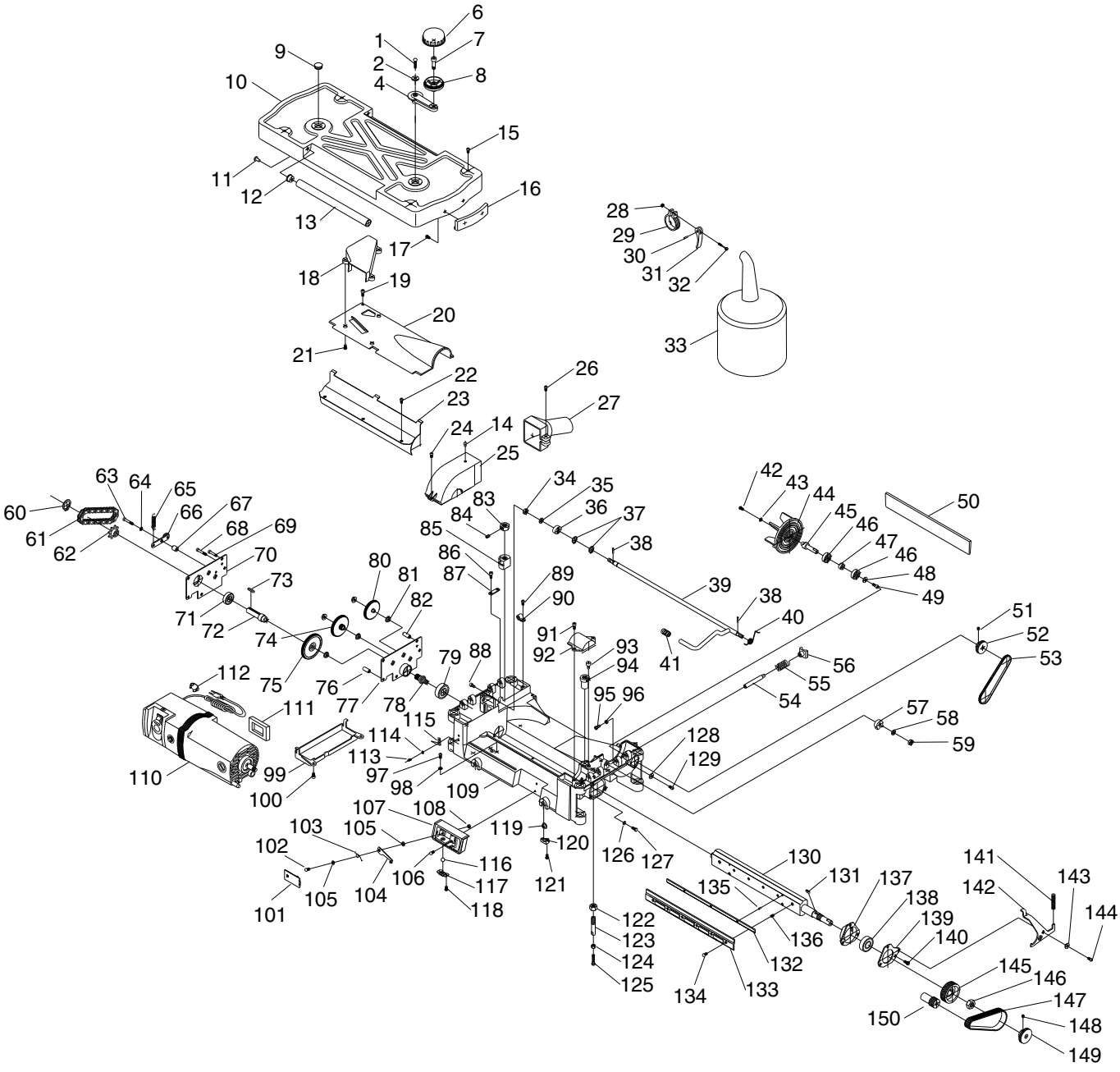


Figure 43. Switch wiring.

SECTION 8: PARTS

Main Parts Breakdown



Main Parts List

REF	PART #	DESCRIPTION
1	PSBS05M	BUTTON HD CAP SCR M6-1 X 20
2	PW03M	FLAT WASHER 6MM
3	P0689003	SIDE COVER (RH)
4	P0689004	HANDLE
5	P0689005	STEP KNOB
6	P0689006	HANDLE CAP
7	P0689007	HANDLE BOLT
8	P0689008	HANDLE BASE
9	P0689009	PLUG
10	P0689010	UPPER COVER
11	P0689011	CLEVIS PIN
12	P0689012	BUSHING
13	P0689013	ROLLER
14	P0689014	PLUG
15	PSBS03M	BUTTON HD CAP SCR M8-1.25 X 16
16	P0689016	GRIP
17	PHTEK14M	TAP SCREW M4 X 6
18	P0689018	AIR GUIDE
19	PSB50M	CAP SCREW M5-.8 X 10
20	P0689020	DUST GUARD
21	PHTEK15M	TAP SCREW M4 X 10
22	PSB50M	CAP SCREW M5-.8 X 10
23	P0689023	DUST CHUTE
24	PSB50M	CAP SCREW M5-.8 X 10
25	P0689025	FAN COVER
26	PSBS21M	BUTTON HD CAP SCR M6-1 X 25
27	P0689027	COLLECTOR TUBE
28	PN01M	HEX NUT M6-1
29	P0689029	CLAMP
30	PRP03M	ROLL PIN 5 X 20
31	P0689031	CLAMP LEVER
32	P0689032	SPECIAL BOLT M6-1 X 20
33	P0689033	DUST COLLECTION BAG
34	PN03M	HEX NUT M8-1.25
35	PLW04M	LOCK WASHER 8MM
36	P0689036	CAM (LEFT)
37	PR16M	EXT RETAINING RING 9MM

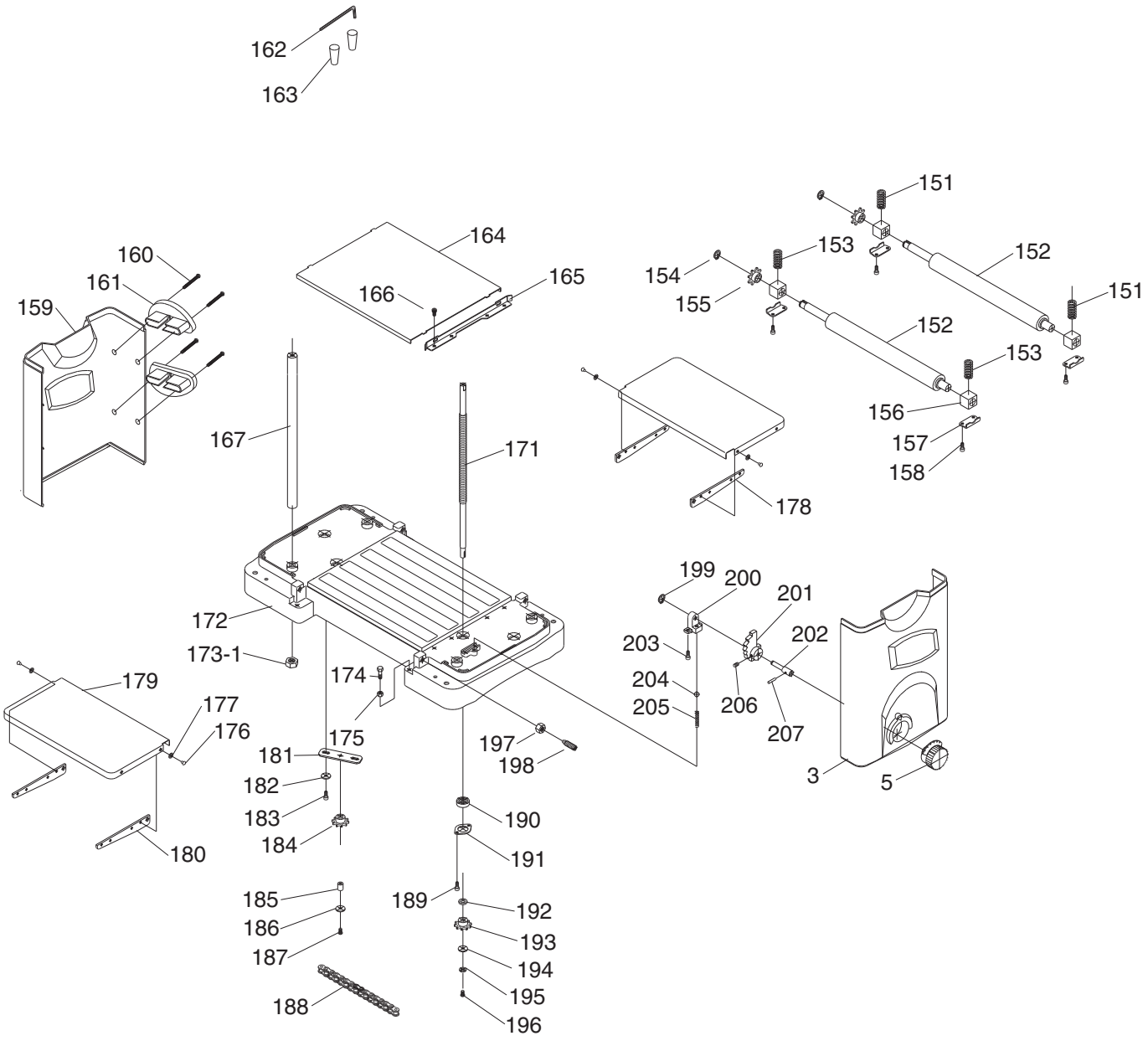
REF	PART #	DESCRIPTION
38	P0689038	SPECIAL PIN
39	P0689039	LOCK LEVER
40	P0689040	TORSION SPRING
41	P0689041	LOCK LEVER CAP
42	PSBS09M	BUTTON HD CAP SCR M6-1 X 12
43	PW03M	FLAT WASHER 6MM
44	P0689044	FAN
45	P0689045	FAN SHAFT
46	P6000	BALL BEARING 6000ZZ
47	P0689047	IMPELLER SPACER (INNER)
48	P0689048	IMPELLER SPACER (OUTER)
49	PSB50M	CAP SCREW M5-.8 X 10
50	P0689050	DEFLECTOR COVER
51	PSS02M	SET SCREW M6-1 X 6
52	P0689052	FAN PULLEY
53	P0689053	IMPELLER BELT 135J2
54	P0689054	ROD
55	P0689055	COMPRESSION SPRING
56	P0689056	PAD
57	P0689057	CAM (RIGHT)
58	PLW04M	LOCK WASHER 8MM
59	PN03M	HEX NUT M8-1.25
60	PR58M	EXT RETAINING RING 24MM
61	P0689061	CHAIN
62	P0689062	SPROCKET
63	PSB15M	CAP SCREW M5-.8 X 20
64	PW02M	FLAT WASHER 5MM
65	P0689065	TENSION SPRING
66	P0689066	TENSION WHEEL ASSY
67	P0689067	SPACER
68	PSB95M	CAP SCREW M5-.8 X 30
69	PSB79M	CAP SCREW M5-.8 X 35
70	P0689070	OUTSIDE COVER
71	P6002	BALL BEARING 6002ZZ
72	P0689072	SHAFT
73	PK48M	KEY 4 X 4 X 20
74	P0689074	GEAR (INTERMEDIATE) 58T X 12T

Main Parts List (Continued)

REF	PART #	DESCRIPTION
75	P0689075	GEAR (LARGE) 70T
76	P0689076	BRACKET STANDOFF
77	P0689077	INSIDE COVER
78	P0689078	PINION GEAR
79	P6202	BALL BEARING 6202ZZ
80	P0689080	GEAR (SMALL) 52T X 12T
81	P0689081	BUSHING
82	P0689082	SPACER UNDERCUT
83	P0689083	SPECIAL NUT M14
84	PSS02M	SET SCREW M6-1 X 6
85	P0689085	ELEVATING NUT (LH)
86	PSB50M	CAP SCREW M5-.8 X 10
87	P0689087	SET PLATE
88	PSB20M	CAP SCREW M5-.8 X 14
89	P0689089	BUTTON HD CAP SCR M5-.8 X 10
90	P0689090	CABLE CLAMP
91	PSB50M	CAP SCREW M5-.8 X 10
92	P0689092	BELT GUARD
93	P0689093	SPECIAL SCREW
94	P0689094	ELEVATING NUT (RH)
95	PB148M	HEX BOLT M5-.8 X 16
96	PN06M	HEX NUT M5-.8
97	PHTEK36M	TAP SCREW M5 X 8
98	PTLW02M	EXT TOOTH WASHER 5MM
99	P0689099	COVER
100	PSB50M	CAP SCREW M5-.8 X 10
101	P0689101	POINTER COVER
102	PSBS14M	BUTTON HD CAP SCR M4-.7 X 16
103	P0689103	TORSION SPRING
104	P0689104	POINTER
105	P0689105	BUSHING
106	PSBS27M	BUTTON HD CAP SCR M4-.7 X 8
107	P0689107	POINTER HOUSING
108	PN04M	HEX NUT M4-.7
109	P0689109	UPPER FRAME
110	P0689110	MOTOR 2HP 1-PH 110V
111	P0689111	GASKET
112	PSW04-4	STRAIN RELIEF

REF	PART #	DESCRIPTION
113	PS17M	PHLP HD SCR M4-.7 X 6
114	PW05M	FLAT WASHER 4MM
115	P0689115	POINTER
116	P0689116	STEEL BALL 12MM
117	P0689117	RETAINING PLATE
118	PHTEK30M	TAP SCREW M3 X 6
119	P0689119	MAGNET
120	P0689120	MAGNET SEAT
121	PFH07M	FLAT HD SCR M5-.8 X 10
122	PN02M	HEX NUT M10-1.5
123	P0689123	STEP ROD
124	PN06M	HEX NUT M5-.8
125	PB148M	HEX BOLT M5-.8 X 16
126	PW01M	FLAT WASHER 8MM
127	PSB31M	CAP SCREW M8-1.25 X 25
128	PW02M	FLAT WASHER 5MM
129	PSB50M	CAP SCREW M5-.8 X 10
130	P0689130	CUTTERHEAD
131	PK10M	KEY 5 X 5 X 12
132	P0689132	KNIVES
133	P0689133	KNIFE LOCK BAR
134	PSB115M	BUTTON HD CAP SCR M6-1 X 16
135	P0689135	CUTTERHEAD PIN
136	P0689136	COMPRESSION SPRING
137	P0689137	BEARING RETAINER
138	PR4AZZ	BALL BEARING 6204
139	P0689139	BEARING COVER
140	PSB33M	CAP SCREW M5-.8 X 12
141	P0689141	COMPRESSION SPRING
142	P0689142	CUTTERHEAD LOCK
143	P0689143	LOCK SPACER
144	PSB50M	CAP SCREW M5-.8 X 10
145	P0689145	CUTTERHEAD PULLEY
146	PN13M	HEX NUT M16-2
147	P0689147	BELT 135J6
148	PSS02M	SET SCREW M6-1 X 6
149	P0689149	CUTTERHEAD EXTEND PULLEY
150	P0689150	MOTOR PULLEY

Base Parts Breakdown

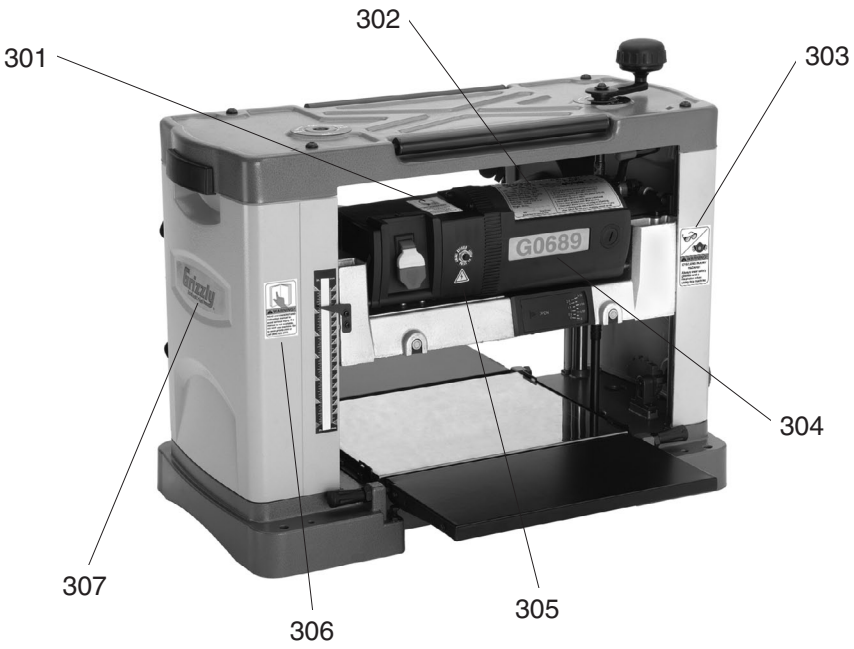


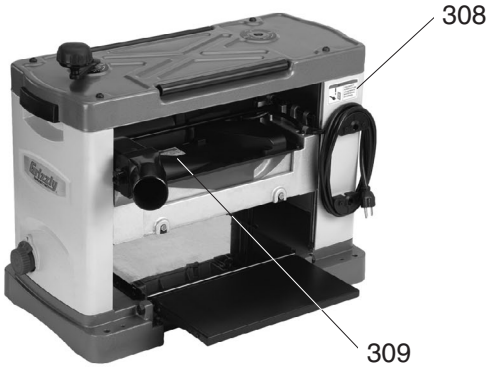
Base Parts List

REF	PART #	DESCRIPTION
151	P0689151	COMPRESSION SPRING
152	P0689152	ROLLER
153	P0689153	COMPRESSION SPRING (INFEED)
154	PR05M	EXT RETAINING RING 15MM
155	P0689155	SPROCKET
156	P0689156	BEARING BLOCK
157	P0689157	RETAINER
158	PSB50M	CAP SCREW M5-.8 X 10
159	P0689159	SIDE COVER (LH)
160	PHTEK16M	TAP SCREW M5 X 25
161	P0689161	CORD SPOOL
162	PAW04M	HEX WRENCH 4MM
163	P0689163	MAGNET
164	P0689164	PLATEN
165	P0689165	GUIDE
166	PSB50M	CAP SCREW M5-.8 X 10
167	P0689167	COLUMN
171	P0689171	ELEVATING SCREW
172	P0689172	BASE
173-1	P0689173-1	SPECIAL NUT
174	PB08M	HEX BOLT M6-1 X 20
175	PN01M	HEX NUT M6-1
176	PFH27M	FLAT HD SCR M4-.7 X 6
177	PW05M	FLAT WASHER 4MM
178	P0689178	TABLE SUPPORT
179	P0689179	EXTENSION TABLE
180	P0689180	ROLLER PLATE (RIGHT)

REF	PART #	DESCRIPTION
181	P0689181	IDLER BRACKET
182	PW02M	FLAT WASHER 5MM
183	PSB33M	CAP SCREW M5-.8 X 12
184	P0689184	SPROCKET
185	P0689185	SPACER
186	PW03M	FLAT WASHER 6MM
187	PSBS05M	BUTTON HD CAP SCR M6-1 X 20
188	P0689188	CHAIN
189	PFB08M	FLANGE BOLT M5-.8 X 10
190	P6000	BALL BEARING 6000ZZ
191	P0689191	BEARING RETAINER
192	P0689192	SPINDLE WASHER
193	P0689193	SPROCKET
194	PW05M	FLAT WASHER 4MM
195	P0689195	SPACER
196	PSBS26M	BUTTON HD CAP SCR M4-.7 X 12
197	PN02M	HEX NUT M10-1.5
198	P0689198	SPECIAL ADJUSTER SCREW
199	PR39M	EXT RETAINING RING 8MM
200	P0689200	STEP BRACKET
201	P0689201	STEP
202	P0689202	SHAFT
203	PSB24M	CAP SCREW M5-.8 X 16
204	P0689204	STEEL BALL 6MM
205	P0689205	COMPRESSION SPRING
206	PSS02M	SET SCREW M6-1 X 6
207	PRP01M	ROLL PIN 4 X 18

Warning Labels Breakdown and List





REF	PART #	DESCRIPTION
301	PLABEL-15B	HEARING PROTECTION LABEL VS
302	P0689302	MACHINE ID LABEL
303	PLABEL-57A	GLASSES/RESPIRATOR LABEL VS
304	P0689304	MODEL NUMBER LABEL
305	PLABEL-14A	ELECTRICITY LABEL 0.7"

REF	PART #	DESCRIPTION
306	PLABEL-12C	READ MANUAL LABEL VS
307	P0689307	GRIZZLY LOGO LABEL
308	PLABEL-62C	DISCONNECT POWER LABEL HS
309	P0689309	REMOVE COVER LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

2. Which of the following magazines do you subscribe to?

____ Cabinet Maker
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Modeltec
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Practical Homeowner
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____ Yes _____ No

8. Would you recommend Grizzly Industrial to a friend? _____ Yes _____ No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____ Yes _____ No

10. Comments: _____

_____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069

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Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number,'' which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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